

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0120235; AI 125944; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Southeastern Louisiana Water & Sewer Company, LLC
West St. Tammany Regional Sewage Treatment Plant
350 North Causeway Blvd
Mandeville, LA 70488
- II. PREPARED BY:** Rachel Davis
- DATE PREPARED:** November 4, 2009
- III. PERMIT ACTION:** revoke and reissue LPDES permit LA0120235, AI 125944; PER20090001

LPDES application received: June 26, 2009

EPA has not retained enforcement authority.

LPDES permit issued: July 1, 2005

LPDES permit expires: June 30, 2010*

*The Department received an application for a modification for the facility because of the increase in flow from 0.50 MGD to 0.57 MGD. Since the previous permit expires next year, the Department will revoke and reissue a permit rather than just modifying the previous permit.

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving residential subdivisions and commercial businesses.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on the north side of Hwy 1085, west of Hwy 1077 in Madisonville, St. Tammany Parish.
- D. The treatment facility consists of a 0.5 MGD extended aeration sewage treatment plant with chlorine disinfection and a 70,000 GPD package treatment plant.
- E. Outfall 001

Discharge Location: Latitude 30° 27' 43" North
Longitude 90° 11' 20" West

Description: treated sanitary wastewater

Designed Capacity 0.57 MGD

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Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Type of Flow Measurement which the facility is currently using:
Continuous Recorder with 90' V-Notch Weir Staff Gauge

V. RECEIVING WATERS:

The discharge is into Fox Branch, thence into Bedico Creek in segment 040702 of the Lake Pontchartrain Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040702 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040702 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040702 of the Lake Pontchartrain Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 24, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public

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hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Davis
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

Subsegment 040702, Tangipahoa River- From I-12 to Lake Ponchartrain, is listed on LDEQ's Final 2006 303(d) List as impaired for ammonia (EPA-Category 5), nutrients (EPA-Category 5), dissolved oxygen (EPA-Category 5), and mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit.

Dissolved Oxygen and Nutrients

To protect against the potential for oxygen consuming pollutants that could cause instream DO problems and for the discharge of nutrients at levels exceeding state water quality standards, CBOD₅ limitations have been established in the permit.

Mercury

To protect against the discharge of mercury at levels exceeding the state water quality standards and for informational purposes for future TMDL development, a reporting requirement for mercury shall be placed into the permit. This permit may be reopened in the future to impose a mercury limitation as a result of the TMDL.

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OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
CBOD ₅	47.5	10 mg/l	15 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
TSS	71.3	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	23.8	5 mg/l	10 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
Mercury		Report	Report	Because the receiving waterbody is impaired for mercury, "Report" of mercury is proposed for information gathering purposes.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that

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the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., Sanitary dischargers must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0120235: Issued: July 1, 2005
Expires: June 30, 2010

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	1/week	3 Hr. Comp
TSS	15 mg/l	23 mg/l	1/week	3 Hr. Comp
Ammonia-Nitrogen	5 mg/l	10 mg/l	1/week	3 Hr. Comp
Fecal Coliform Colonies	200	400	1/week	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates that no inspections have been done at the facility in the past two years.

B) Compliance and/or Administrative Orders

A review of the files indicates that no compliance orders have been issued against the facility in the past two years.

C) DMR Review

A review of the discharge monitoring reports for the period beginning **June 2007** through **June 2009** has revealed no violations

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

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This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.57 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.57 \text{ MGD} \times 10 \text{ mg/l} = 47.5 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.5 and 1.0 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
CBOD ₅	1/week	3 Hr. Composite
Total Suspended Solids	1/week	3 Hr. Composite
Ammonia-Nitrogen	1/week	3 Hr. Composite
Fecal Coliform Bacteria	1/week	Grab
pH	1/week	Grab

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to revoke and reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Southeastern Louisiana Water & Sewer Company, LLC, West St. Tammany Regional Sewage Treatment Plant, June 26, 2009.